SEQUENCE LISTING

<110> Mueller, Sybille, Kohler, Heinz

<120> NUCLEOTIDE SEQUENCES ENCODING VARIABLE REGIONS OF HEAVY AND LIGHT CHAINS OF MONOCLONAL ANTIBODY 1F7, AN ANTI-IDIOTYPIC ANTIBODY REACTIVE WITH ANTI-HIV ANTIBODIES

<130> 200-013

<160> 38

<170> PatentIn version 3.0

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<222> (1)..(37)
<223> 1F7 heavy chain 5' primer

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cagccttcag gaaagggtct ggagtggctg gcacacattt actgggatga tgacaagcgc 180

tataacccat ccctgaagag ccggcttaca atctccaagg atacctccag caaccaggta 240

ttcctcaaga tcaccagtgt ggacactcga gatactgcca catactactg tgctcgaagg 300

gtctctctaa ctgcctatgc tatggactac tggggtcaag gaacctcagt caccgtctcc 360

tca 363

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<223> 1F7 VH chain gene

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cag gtt act ctg aaa gag tct ggc cct ggg ata ttg cag ccc tcc cag 48
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1 5 10 15

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acc ctc agt ctg act tgt tct ttc tct ggg ttt tca ctg agc act tct       96
Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser Thr Ser
            20                  25                  30

ggt atg ggt gtg agc tgg att cga cag cct tca gga aag ggt ctg gag      144
Gly Met Gly Val Ser Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu
        35                  40                  45

tgg ctg gca cac att tac tgg gat gat gac aag cgc tat aac cca tcc      192
Trp Leu Ala His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser
    50                  55                  60

ctg aag agc cgg ctt aca atc tcc aag gat acc tcc agc aac cag gta      240
Leu Lys Ser Arg Leu Thr Ile Ser Lys Asp Thr Ser Ser Asn Gln Val
65                  70                  75                  80

ttc ctc aag atc acc agt gtg gac act cga gat act gcc aca tac tac      288
Phe Leu Lys Ile Thr Ser Val Asp Thr Arg Asp Thr Ala Thr Tyr Tyr
                85                  90                  95

tgt gct cga agg gtc tct cta act gcc tat gct atg gac tac tgg ggt      336
Cys Ala Arg Arg Val Ser Leu Thr Ala Tyr Ala Met Asp Tyr Trp Gly
            100                 105                 110

caa gga acc tca gtc acc gtc tcc tca                                 363
Gln Gly Thr Ser Val Thr Val Ser Ser
        115                 120
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<400> 7

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Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1               5                   10                  15

Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser Thr Ser
            20                  25                  30

Gly Met Gly Val Ser Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu
        35                  40                  45

Trp Leu Ala His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser
    50                  55                  60

Leu Lys Ser Arg Leu Thr Ile Ser Lys Asp Thr Ser Ser Asn Gln Val
65                  70                  75                  80

Phe Leu Lys Ile Thr Ser Val Asp Thr Arg Asp Thr Ala Thr Tyr Tyr
                85                  90                  95
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Cys Ala Arg Arg Val Ser Leu Thr Ala Tyr Ala Met Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

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<211> 90
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<223> 1F7 VH FR1 sequence

<400> 8
cag gtt act ctg aaa gag tct ggc cct ggg ata ttg cag ccc tcc cag 48
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1 5 10 15

acc ctc agt ctg act tgt tct ttc tct ggg ttt tca ctg agc 90
Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser
20 25 30

<210> 9
<211> 30
<212> PRT
<213> mouse

<400> 9
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser
20 25 30

<210> 10
<211> 21
<212> DNA
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<220>
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<222> (1)..(21)
<223> 1F7 VH CDR1 sequence

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act tct ggt atg ggt gtg agc 21
Thr Ser Gly Met Gly Val Ser
1 5

<210> 11
<211> 7
<212> PRT
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<400> 11
Thr Ser Gly Met Gly Val Ser
1 5

<210> 12
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<212> DNA
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<220>
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<223> 1F7 VH FR2 sequence

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Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu Trp Leu Ala
1 5 10

<210> 13
<211> 14
<212> PRT
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<400> 13
Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu Trp Leu Ala
1 5 10

<210> 14
<211> 48
<212> DNA
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<220>
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<222> (1)..(48)
<223> 1F7 VH CDR2 sequence

<400> 14
cac att tac tgg gat gat gac aag cgc tat aac cca tcc ctg aag agc 48
His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

<210> 15
<211> 16
<212> PRT
<213> mouse

<400> 15
His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

<210> 16
<211> 96
<212> DNA
<213> mouse

<220>
<221> CDS
<222> (1)..(96)
<223> 1F7 VH FR3 sequence

<400> 16
cgg ctt aca atc tcc aag gat acc tcc agc aac cag gta ttc ctc aag 48
Arg Leu Thr Ile Ser Lys Asp Thr Ser Ser Asn Gln Val Phe Leu Lys
1 5 10 15

atc acc agt gtg gac act cga gat act gcc aca tac tac tgt gct cga 96
Ile Thr Ser Val Asp Thr Arg Asp Thr Ala Thr Tyr Tyr Cys Ala Arg
20 25 30

<210> 17
<211> 32
<212> PRT
<213> mouse

<400> 17
Arg Leu Thr Ile Ser Lys Asp Thr Ser Ser Asn Gln Val Phe Leu Lys
1 5 10 15

Ile Thr Ser Val Asp Thr Arg Asp Thr Ala Thr Tyr Tyr Cys Ala Arg
20 25 30

<210> 18
<211> 33
<212> DNA
<213> mouse

<220>
<221> CDS
<222> (1)..(33)
<223> 1F7 VH CDR3 sequence

<400> 18
agg gtc tct cta act gcc tat gct atg gac tac 33
Arg Val Ser Leu Thr Ala Tyr Ala Met Asp Tyr
1 5 10

<210> 19
<211> 11
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<400> 19
Arg Val Ser Leu Thr Ala Tyr Ala Met Asp Tyr
1 5 10

<210> 20
<211> 33
<212> DNA
<213> mouse

<220>
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<222> (1)..(33)
<223> 1F7 VH FR4 sequence

<400> 20
tgg ggt caa gga acc tca gtc acc gtc tcc tca 33
Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser
1 5 10

<210> 21
<211> 11
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<400> 21
Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser
1 5 10

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<400> 22
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atctcctgca aggccagcca aagtgttgat tatgatggtg atagttatat gtggtaccaa 120

cagaaaccag gacagccacc caaactcctc acctatgctg catccaatct agaatctggg 180

atcccagcca ggtttagtgg cagtgggtct gggacagact tcaccctcaa catccatcct 240

gtggaggagg aggatgctgc aacctattac tgtcagcttt gtaatgagga tcctcccacg 300

ttcggtgctg ggaccaagct ggagctgaaa 330

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<211> 330
<212> DNA
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<220>
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<222> (1)..(330)
<223> 1F7 VL chain gene

<400> 23
gac att gtg ctc acc aat tct cca gct tct ttg gct gtg tct cta ggg 48
Asp Ile Val Leu Thr Asn Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1 5 10 15

cag agg gcc acc atc tcc tgc aag gcc agc caa agt gtt gat tat gat 96
Gln Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Val Asp Tyr Asp
20 25 30

ggt gat agt tat atg tgg tac caa cag aaa cca gga cag cca ccc aaa 144
Gly Asp Ser Tyr Met Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys
35 40 45

ctc ctc acc tat gct gca tcc aat cta gaa tct ggg atc cca gcc agg 192
Leu Leu Thr Tyr Ala Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala Arg
50 55 60

ttt agt ggc agt ggg tct ggg aca gac ttc acc ctc aac atc cat cct 240
Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His Pro
65 70 75 80

gtg gag gag gag gat gct gca acc tat tac tgt cag ctt tgt aat gag 288
Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Leu Cys Asn Glu
85 90 95

gat cct ccc acg ttc ggt gct ggg acc aag ctg gag ctg aaa 330
Asp Pro Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
100 105 110

<210> 24
<211> 110
<212> PRT
<213> mouse

<400> 24
Asp Ile Val Leu Thr Asn Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Gln Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Val Asp Tyr Asp
20 25 30

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Gly Asp Ser Tyr Met Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys
        35                  40                  45

Leu Leu Thr Tyr Ala Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala Arg
    50                  55                  60

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His Pro
65                  70                  75                  80

Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Leu Cys Asn Glu
                85                  90                  95

Asp Pro Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
            100                 105                 110
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<211> 69
<212> DNA
<213> mouse

<220>
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<400> 25

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gac att gtg ctc acc aat tct cca gct tct ttg gct gtg tct cta ggg       48
Asp Ile Val Leu Thr Asn Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1               5                   10                  15

cag agg gcc acc atc tcc tgc                                         69
Gln Arg Ala Thr Ile Ser Cys
            20
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<210> 26
<211> 23
<212> PRT
<213> mouse

<400> 26

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Asp Ile Val Leu Thr Asn Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1               5                   10                  15

Gln Arg Ala Thr Ile Ser Cys
            20
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<210> 27
<211> 42
<212> DNA
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<223> 1F7 VL CDR1 sequence

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aag gcc agc caa agt gtt gat tat gat ggt gat agt tat atg 42
Lys Ala Ser Gln Ser Val Asp Tyr Asp Gly Asp Ser Tyr Met
1 5 10

<210> 28
<211> 14
<212> PRT
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<400> 28
Lys Ala Ser Gln Ser Val Asp Tyr Asp Gly Asp Ser Tyr Met
1 5 10

<210> 29
<211> 45
<212> DNA
<213> mouse

<220>
<221> CDS
<222> (1)..(45)
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<400> 29
tgg tac caa cag aaa cca gga cag cca ccc aaa ctc ctc acc tat 45
Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Thr Tyr
1 5 10 15

<210> 30
<211> 15
<212> PRT
<213> mouse

<400> 30
Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Thr Tyr
1 5 10 15

<210> 31
<211> 21
<212> DNA
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<220>
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<400> 31
gct gca tcc aat cta gaa tct 21
Ala Ala Ser Asn Leu Glu Ser
1 5

<210> 32
<211> 7
<212> PRT
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<400> 32
Ala Ala Ser Asn Leu Glu Ser
1 5

<210> 33
<211> 96
<212> DNA
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<223> 1F7 VL FR3 sequence

<400> 33
ggg atc cca gcc agg ttt agt ggc agt ggg tct ggg aca gac ttc acc 48
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

ctc aac atc cat cct gtg gag gag gag gat gct gca acc tat tac tgt 96
Leu Asn Ile His Pro Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys
20 25 30

<210> 34
<211> 32
<212> PRT
<213> mouse

<400> 34
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

Leu Asn Ile His Pro Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys
20 25 30

<210> 35
<211> 27
<212> DNA
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<220>
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<222> (1)..(27)
<223> 1F7 VL CDR3 sequence

<400> 35
cag ctt tgt aat gag gat cct ccc acg 27
Gln Leu Cys Asn Glu Asp Pro Pro Thr
1 5

<210> 36
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<212> PRT
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<400> 36
Gln Leu Cys Asn Glu Asp Pro Pro Thr
1 5

<210> 37
<211> 30
<212> DNA
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<222> (1)..(30)
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<400> 37
ttc ggt gct ggg acc aag ctg gag ctg aaa 30
Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
1 5 10

<210> 38
<211> 10
<212> PRT
<213> mouse

<400> 38
Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
1 5 10